July 2019

Imposing a Deadline on the IRS: Artificial Intelligence Tries to Beat 'Starcraft' While the IRS Tries to Regulate Virtual Currency

Paul C. Nylen

IMPOSING A DEADLINE ON THE IRS: ARTIFICIAL INTELLIGENCE TRIES TO BEAT 'STARCRAFT' WHILE THE IRS TRIES TO REGULATE VIRTUAL CURRENCY

*Paul C. Nylen**

I. INTRODUCTION

For decades, there was serious debate about whether computers would ever be able to beat the world's best human chess player. In 1996, computers started beating humans in chess.[1] The debate then moved on to the game Go.[2] In 2016, Google's program, AlphaGo, beat the world champion at Go.[3] The last frontier appears to be the game StarCraft.[4] The prospect of a computer beating StarCraft is difficult because of the types of challenges it poses, including: complexity, endless permutations, the lack of visibility of your opponent, and the role lying plays in the game.[5] With great challenges come great competitors. Facebook, Google, and Microsoft are all designing a computer that can beat humans in StarCraft. So far, they have not succeeded.

While computers are struggling to beat humans in StarCraft, the Internal Revenue Service is struggling to regulate United States taxpayer compliance with virtual currency. Virtual currency is quickly evolving to include thousands of variations. Making this issue more difficult is that this evolution is not taking place under the light of any government regulation. Instead, almost all of the growth is taking place in decentralized systems that lack governmental rules or jurisdiction. Compounding this growth is the increased prominence that virtual currencies are playing in the average U.S. investor's portfolio. Towards the end of 2017, the Wall Street Journal ran an article about grandmothers who want to trade virtual currency.[6] Needless to say, the popularity of virtual currencies has grown exponentially.

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1. Marina Koren, *When Computers Started Beating Chess Champions*, THE ATLANTIC (Feb. 10, 2016), https://www.theatlantic.com/technology/archive/2016/02/when-computers-started-beating-chess-champions/462216/ [https://perma.cc/69DJ-KQDQ].

2. Associated Press, *Google Software Beats Human Go Champion*, WALL ST. J. (Mar. 9, 2016), https://www.wsj.com/articles/googles-software-beats-human-go-champion-1457516770 [https://perma.cc/Z9L7-VW73].

3. *Id.*

4. Jonathan Cheng, *Computers That Crush Humans at Games Might Have Met Their Match: 'StarCraft'*, WALL ST. J. (Apr. 22, 2016), https://www.wsj.com/articles/computers-that-crush-humans-at-games-Might-have-Met-their-match-starcraft-1461344309 [https://perma.cc/525J-PU5X].

5. *Id.*

6. Peter Rudegeair & Akane Otani, *Bitcoin Mania: Even Grandma Wants in on the Action*, WALL ST. J. (Nov. 29, 2017), https://www.wsj.com/articles/bitcoin-mania-even-grandma-wants-in-on-the-action-1511996653 [https://perma.cc/35KP-7N54].

Because of this interest, both the business and legal issues surrounding virtual currency have been the focus of a new stream of literature. For the tax world, the literature is in its infantile stages in terms of new regulations, yet mature in the sense that traditional tax concepts seem to apply, albeit not always neatly. This article first explores the background of virtual currency in part II and then moves on to highlight some of the key tax concepts that are at play with virtual currency, including the questions of property versus currency classification. Part IV discusses the confusion that surrounds current reporting requirements, and parts V and VI explore alternative reporting options. Finally, part VII examines the new challenges faced by the IRS in light of Executive Order 13771. The topics discussed in this article should serve as a starting point for how to think about virtual currency in the current tax climate. As new regulations are issued, some of these concepts will either be reinforced or deemed obsolete.

The goal is for this article to serve as a launching pad. While the IRS rarely worries about providing timely regulations to taxpayers, without continued and timely guidance, the world of virtual currency may expand so quickly that the IRS will never provide taxpayers with the tools needed to meet their compliance requirements. That being said, a timeline should be proposed on when the IRS begins effectively regulating virtual currency.[7] Seeing that most private companies and individuals are motivated by competition, perhaps competition could also motivate a government agency. I, therefore, propose the IRS compare its regulatory efficiency with the race for computers to beat StarCraft. The goal should be for the IRS to effectively regulate virtual currencies before Facebook or Google create a computer that can beat humans at StarCraft. It may take one year, or it may take ten years. Let the race commence.

II. TECHNICAL ASPECTS OF CRYPTO ASSETS

Crypto assets are typically analyzed in three separate layers. The first layer is *virtual currencies.*[8] This layer includes items like: Bitcoin cash, Bitcoin, Litecoin, Dash, and Monero. This is not an all-inclusive list, but these currencies have the longest and most established trading history,

7. Implicit in this comment is the fact that the IRS has not, to date, issued sufficient regulatory guidance.

8. Nathan Fulmer, *Exploring the Legal Issues of Blockchain Applications*, 52 AKRON L. REV. 161, 174 (2018).

and, as of 2017, are the most popular virtual currencies to buy and sell.[9] All of these virtual currencies can be used as a medium for exchanging value in a cryptographic way. Put differently, virtual currencies are a way to store value the same way one would store value by buying rare metals. The second layer is *crypto protocols*.[10] This layer includes items like: Ethereum, Neo, Eos, and Cardano. The current internet is built upon a set of protocols, for example "http." Traditional protocols have become one of the backbones of the entire internet. Crypto protocols are attempting to build a new set of protocols that will allow decentralized applications to be built on them, as opposed to traditional protocols like "http."[11] The third layer is *crypto enterprises.*[12] This layer operates as a decentralized storage token. In general, if someone owns this type of token they will be able to store their files securely and in a decentralized manner. An analogy is Dropbox, but in a decentralized capacity.[13] *Crypto enterprises* are being built on top of *crypto protocols.*[14]

This framework describes the crypto asset market as of 2018. The extent by which virtual currencies and crypto assets are expanding cannot be overstated. It is difficult for a week to go by where a new type of crypto asset is not created or a new type of initial coin offering does not take place.[15] With this current framework in mind, let us explore how the current U.S. tax laws apply to crypto assets and virtual currencies, specifically.

III. TAX DICHOTOMY OF VIRTUAL CURRENCY

The U.S. Congress has a rich history in establishing U.S. tax law. In 1861, James F. Simmons, a Republican Senator from Rhode Island, argued that no attempt should be made on how to specifically compute a

9. It is worth noting that the virtual currency market is extremely volatile, and by the time this article is published, virtual currencies that did not exist in 2017, or were trading for pennies on the U.S. dollar, may become the dominant virtual currencies.

10. These are also known in the marketplace as "smart contracts" or "programmable money." Crypto asset investors tend to think about this layer as "Bitcoin 2.0."

11. Steven Johnson, *Beyond the Bitcoin Bubble,* N.Y. TIMES (Jan. 16, 2018), https://www.nytimes.com/2018/01/16/magazine/beyond-the-bitcoin-bubble.html [https://perma.cc/AFX9-KYGG].

12. Also known as "crypto applications."

13. Crypto enterprises are often times used to gamble or send messages to one another in a decentralized way.

14. Johnson, *supra* note 11.

15. Initial coin offerings operate similarly to initial public offerings; however, instead of investors receiving shares of a company, investors receive virtual coins.

taxpayer's income.[16] Instead, the Senator argued that the goal ought to be "only [to] make it more confused than it is now."[17] Senator Simmons would be proud to know that the IRS has adopted this principle in determining the tax consequences of virtual currency. From a U.S. federal tax perspective, virtual currency provides for a unique dichotomy. One half of the dichotomy is the concept of property. The other half is the concept of currency. This dichotomy may seem *prima facie* disingenuous. However, the IRS considers virtual currencies to be property, not currency.[18] This may appear to be an unreasonable decision to companies and individuals that have not practiced tax law or accounting. For most tax professionals, this determination did not come as a surprise.

A. *The IRS Position: Virtual Currency is Property*

The IRS's official position on virtual currency says:[19]

> Virtual currency is a digital representation of value that functions as a medium of exchange, a unit of account, and/or a store of value. In some environments, it operates like "real" currency—i.e., the coin and paper money of the United States or of any other country that is designated as legal tender, circulates, and is customarily used and accepted as a medium of exchange in the country of issuance—but it does not have legal tender status in any jurisdiction.[20]

If a medium of exchange does not have legal tender status in any jurisdiction, it is considered property. The IRS's position is consistent with the U.S. Constitution, which grants Congress the power to *coin money* and to *regulate the value thereof*.[21] Interestingly, there is nothing in the U.S. Constitution that grants the U.S. government the sole right to coin money. There are, however, legal tender statutes stating, "United States coins and currency (including Federal reserve notes and circulating notes of Federal reserve banks and national banks) are legal tender for all

16. J.S. SEIDMAN, SEIDMAN'S LEGISLATIVE HISTORY OF FEDERAL INCOME TAX LAWS 1938–1861, 1043 (Prentice-Hall, Inc. 1938).

17. SEIDMAN, *supra* note 16.

18. IRS Notice 2014–21, 2014–2016 I.R.B. 938.

19. *Id.*

20. *Id.* This sentence, which effectively states the IRS's reasoning on why virtual currencies are not treated as currency, because they do have any legal tender in any jurisdiction, is quickly becoming problematic. *See, e.g.*, Emiko Terazono, *Bitcoin gets official blessing from Japan*, THE FINANCIAL TIMES (Oct. 17, 2017), https://www.ft.com/content/b8360e86-aceb-11e7-aab9-abaa44b1e130 [https://perma.cc/5G6N-F7E2].

21. U.S. CONST. art I, § 8.

debts, public charges, taxes, and dues. Foreign gold or silver coins are not legal tender for debts."[22]

If this code section were written in 2018 instead of 1983, the last sentence may have read as, "Crypto assets or virtual currency are not legal tender for debts." Context is important. Historically, these statutes came into public view when U.S. citizens engaged in moral and philosophical battles with the idea that the U.S. government does not have the authority to be the sole source of legal tender in the U.S.—not when traditional sellers and customers engage in commerce.[23] This is also a common theme among U.S. citizens that believe the U.S. dollar should still be backed by gold.[24] Nonetheless, the U.S. government has stood by its position on currency. The U.S. government has the sole authority to issue currency, and just in case there was any confusion whether precious metals can take the place of U.S. currency, § 5103 makes it clear that gold is neither currency nor a legal tender.[25]

B. *Understanding Virtual Currency Through the Lens of Gold*

If gold has not been able to generate legal tender status through the judicial system, then virtual currencies are likely to face an equally difficult challenge. Because gold is not considered legal tender, it is therefore considered property.[26] Property, for tax purposes, is treated the same way as other commodities.[27] For example, upon purchase of a commodity with U.S. dollars, the purchaser does not recognize income.

22. 31 U.S.C. § 5103 (2018).

23. *See, e.g.*, Alan Feuer, *Prison May Be the Next Stop on a Gold Currency Journey*, N.Y. TIMES (Oct. 24, 2012), http://www.nytimes.com/2012/10/25/us/liberty-dollar-creator-awaits-his-fate-behind-bars.html [https://perma.cc/NK2F-8FB9].

24. RON PAUL, LEWIS E. LEHRMAN & UNITED STATES GOLD COMMISSION, THE CASE FOR GOLD: A MINORITY REPORT OF THE U.S. GOLD COMMISSION (Cato Institute 1983).

25. 31 U.S.C. § 5103 (2018); Sandra Kollen Ghizoni, *Creation of the Bretton Woods System*, FEDERAL RESERVE HISTORY (Nov. 22, 2013), https://www.federalreservehistory.org/essayhttps://www.federalreservehistory.org/essays/bretton_woods_createds/ [https://perma.cc/4FSR-K8YN].

26. It is also worth noting that gold serves as a particularly accurate analogy because both gold and virtual currencies have a vocal minority that believe either gold or virtual currency should be accepted by the U.S. government as currency and because one can physically mine gold and *virtually* mine currency. This analogy does, however, allow for less desirable analogies due to gold's history of creating distasteful tax laws. For example, see the Foreign Miners License Tax enacted by the California legislature in 1850, which in effect was a racist law that prevented Chinese immigrants from partaking in the gold rush.

27. *See* Treas. Reg. § 1.61-1(a) (2019) (Gross income means all income from whatever source derived, unless excluded by law. Gross income includes income realized in any form, whether in money, property, or services. Income may be realized, therefore, in the form of services, meals, accommodations, stock, or other property, as well as in cash.").

The purchaser does, however, take a basis in the commodity equal to the price paid.[28] This is known as a *cost* basis.[29] When the purchaser eventually sells that commodity, the taxpayer realizes[30] a gain or loss equal to the fair market value of the amount received less its basis.[31] This basic tax equation is codified in Internal Revenue Code section 1001(a). To the extent that a taxpayer is selling a commodity and receiving U.S. dollars in return, the transaction is relatively straightforward. The example becomes more complicated and more expensive from a taxation perspective when the medium of exchange is between two pieces of property and not between currency and property. Gold is a good example.

Using gold (or any commodity) as a form of exchange is inherently a more expensive medium than U.S. dollars. The main reason is because the U.S. income tax system taxes any gain or loss relating to the exchange of commodities.[32] For example, assume a taxpayer walks around a farmers market, but instead of food being for sale, the farmers are selling silver, platinum, and copper. If the taxpayer does not have any U.S. dollars to make the purchases of silver, platinum, or copper, but instead uses gold, every time the taxpayer purchases one of these special metals, the transaction is taxable. The IRS would view the taxpayer as exchanging its gold (with a certain basis attached to it) for one of the other metals (which would have a certain fair market value attached to it). The fair market value, less the basis, is equal to the gain or loss that would be included in a taxpayer's gross income.[33] Assuming the taxpayer is in the 20% tax bracket, the taxpayer is now directly increasing his or her own costs by the amount of the tax rate (20%) in order to purchase one of the special metals.

28. I.R.C. § 1012 (2018).

29. *Id.*

30. The taxpayer realizes or recognizes the gain or loss depending on the unique circumstances of the taxpayer that engaged in the transaction. It is worth noting that while the Internal Revenue Code almost always requires gain to be recognized, often times losses are realized but not recognized under various provisions in the Internal Revenue Code and Regulations; *See, e.g.*, I.R.C § 267(d) (2019)).

31. *See, e.g.*, Comm'r v. Glenshaw Glass Co., 348 U.S. 426 (1955), where the court discusses taxable receipts. This has been interpreted to fall within I.R.C. § 61(a)(3) (2018), which includes "gains derived from dealings in property."

32. *See, e.g.*, Rev. Rul. 79-24 where multiple taxpayers were all members of a barter club. Instead of paying for services with U.S. dollars, the members of the club would exchange pieces of property with one another. Specifically, in Situation 2 of the Ruling, the Commissioner determined that an individual who owned an apartment building allowed an artist to live in the apartment building rent-free. Instead of paying rent, the artist provided the apartment owner with pieces of art. The commission concluded that Treas. Reg. § 1.61-2(d)(1) (2018) clearly applied, and, therefore, the fair market value of the property must be included in income.

33. I.R.C. § 61(a)(3) (2018).

Now imagine a taxpayer walking around this same market that is filled with vendors selling special metals. Instead of purchasing the special metals with gold, assume the taxpayer purchases the metals with U.S. dollars. There is no realization or recognition event for U.S. tax purposes for the purchaser. By exchanging U.S. dollars instead of gold, the taxpayer has avoided a taxable event. It is not until the taxpayer sells his precious metals in exchange for U.S. dollars that a taxable event occurs. This example highlights how identical transactions can take place, one using U.S. dollars and the other using property. Yet, the Internal Revenue Code treats them differently because gold is not considered a currency—it is considered property. From the IRS's perspective, engaging in commerce using virtual currencies is exactly the same as using gold. Both are considered property.

The U.S. Supreme Court's first Chief Justice John Marshall stated, "The power to tax involves the power to destroy. . . ."[34] Chief Justice Marshall was not referring to virtual currency nor gold. And yet this principle is at the core of virtual currencies' existence. Virtual currencies are placed at a considerable tax disadvantage when treated as property, compared to U.S. dollars, because property transactions are directly taxed.[35] The U.S. government's ability to tax virtual currency is also its ability to destroy it.

There are countless other examples of the U.S. government attempting to destroy taxpayer behavior through taxation. The most well-known example may be the tobacco industry. The U.S. government has never banned tobacco outright. However, tobacco has been subject to numerous federal, state, and local taxes, and, as such, it may be taxed out of existence in the not far future.[36] This same risk, destroying through taxation or regulation,[37] applies to virtual currencies as long as the IRS continues to treat them as property and not currency.

34. McCulloch v. Maryland, 17 U.S. 316 (1819).

35. IRS Notice, *supra* note 18.

36. William Neuman, *De Blasio Backs Plan to Lift Base Price of Pack of Cigarettes to $13*, N.Y. TIMES (Apr. 19, 2017), https://www.nytimes.com/2017/04/19/nyregion/de-blasio-smoking-new-york-city-tobacco.html?_r=0 [https://perma.cc/WP69-6R6N] (For example, the mayor of New York City has openly stated that by raising cigarette prices to $13 a pack, he is attempting to persuade or coerce 160,000 of the 900,000 New York City residents who smoke to stop doing so by 2020.).

37. Regulation of virtual currency is already occurring at the state level; *See, e.g.*, Michael J. Casey, *New York Soon to Unveil Fresh Bitcoin Licensing Rules*, THE WALL ST. J (May 21, 2015), https://www.wsj.com/articles/new-york-soon-to-unveil-fresh-bitcoin-licensing-rules-1432231438 [https://perma.cc/D248-SN8H].

IV. REPORTING REQUIREMENTS

A. Form 1099

From the IRS's perspective, there is substantial concern that taxpayers who engage in virtual currency transactions are not complying with the tax laws.[38] The starting point for enforcing taxpayer compliance is to ensure adherence to proper reporting requirements. Currently, the IRS requires any individual that recognized a taxable gain or loss during the year to report income on a Form 1099.[39] While it is unclear which specific Form 1099 (1099B, 1099-MISC, etc.) should be used for reporting (because virtual currency is not considered a registered security), general tax compliance rules suggest that Form 1099 is the correct vehicle for reporting taxable income from transactions involving virtual currency.[40] Moreover, by requiring companies to issue Form 1099s to their customers, the IRS may be able to increase the efficiency of tax collection by ensuring taxpayers include the correct amount of gain or loss on their tax return.[41]

The compliance issue is already starting to work its way through the court system. The IRS is pursuing one of the largest virtual currency brokers, Coinbase, through a "John Doe" summons.[42] Coinbase is an exchange where individuals are able to exchange U.S. dollars for virtual currency.[43] The IRS is interested in Coinbase because of its rapidly growing user base.[44] The summons was originally filed in the United States District Court for the Northern District of California.[45] Since its original filing in November 2016, the case has expanded to include

38. Robert W. Wood, *IRS Hunts Bitcoin User Identities with Software in Tax Enforcement Push*, FORBES (Aug. 24, 2017), https://www.forbes.com/sites/robertwood/2017/08/24/irs-hunts-bitcoin-user-identities-with-software-in-tax-enforcement-push/#39b8aa909cd0 [https://perma.cc/ZV3D-6245].

39. IRS, *Instructions Form 1099:General Instructions for Certain Information Returns*, IRS.GOV (2019), https://www.irs.gov/pub/irs-pdf/i1099gi.pdf [https://perma.cc/4T27-NTDP].

40. IRS Notice, *supra* note 18.

41. This is a core function of how the IRS enforces tax compliance. First, by ensuring that 1099s are issued to U.S. taxpayers, and second, by sending an identical copy of those 1099s to the Internal Revenue Service.

42. A "John Doe" summons is an order that does not specifically identify the person but rather identifies a person or ascertainable group or class by their activities.

43. Coinbase, https://www.coinbase.com/ [https://perma.cc/B9RA-JABN].

44. Evelyn Cheng, *Bitcoin exchange Coinbase has more users than stock brokerage Schwab*, CNBC (Nov. 27, 2017), https://www.cnbc.com/2017/11/27/bitcoin-exchange-coinbase-has-more-users-than-stock-brokerage-schwab.html [https://perma.cc/WZ6N-SH97].

45. *Ex Parte* Petition for Leave to Serve "John Doe" Summons, United States v. Joe Doe, No. 3:16-cv-06658-JSC (N.D. Cal. Nov. 17, 2016).

multiple amicus curiae briefs.[46] At the time of this article's submission, it was not judicially determined if Coinbase must provide the IRS with its customer list. However, the IR has exceptional power and a strong track record[47] when it comes to determining whether any business is hiding the identities of taxpayers that may owe tax on unrecorded taxable gains.

B. FinCEN Reporting

1. FBARs and Form 114

In addition to Form 1099 reporting, there is an open question regarding whether taxpayers need to report any of their virtual currency holdings through a Report of Foreign Bank and Financial Accounts (FBAR) (also known as a Form 114) or Form 8938. Neither the FBAR nor the Form 8938 are administered by the IRS but instead by the Financial Crimes Enforcement Network (FinCEN).[48] The purpose of both the FBAR and Form 8938 is to require U.S. taxpayers that maintain foreign bank accounts or financial assets to disclose those accounts and the balance of funds. From an individual taxpayer perspective, there is conflicting advice on whether an FBAR must be filed for taxpayers holding virtual currency.[49] To the extent virtual currencies are considered property, it is difficult from a policy perspective to envision that an FBAR was intended to include foreign property. This is demonstrated by the fact that Form 114 requires taxpayers to list bank account numbers and account balances.[50]

The FinCEN has more than just the FBAR at its disposal. It also requires taxpayers to file Form 8938. Taxpayers must file Form 8938 if they are a specified person (either a specified individual or a specified

46. Kelly Phillips Erb, *IRS Responds to Privacy, Other Challenges in Bitcoin Records Fight*, FORBES.COM (Sept. 5, 2017), https://www.forbes.com/sites/kellyphillipserb/2017/09/05/irs-responds-to-privacy-other-challenges-in-bitcoin-records-fight/#66055b2065aa [https://perma.cc/3NGZ-FAK7].

47. *See, e.g.*, Carrick Mollenkamp et al., *Switzerland, UBS Settle U.S. Tax Case,* WALL ST. J. (Aug. 13, 2009), https://www.wsj.com/articles/SB125007792394025747 [https://perma.cc/GD2P-TR7P] (explaining how the IRS came to an agreement with UBS and forced UBS to report 8,000 to 10,000 names of U.S. taxpayers that were not reporting Swiss bank accounts).

48. The Financial Crimes Enforcement Network (FinCEN) is a bureau of the Department of the Treasury, separate from the IRS.

49. *See, e.g.*, IRS, *Comparison of Form 8938 and FBAR Requirements*, IRS.GOV, https://www.irs.gov/businesses/comparison-of-form-8938-and-fbar-requirements [https://perma.cc/667B-R6G8] (the IRS's determination about which types of assets need to be reported on an FBAR)

50. *See* IRS, *FBAR Reference Guide*, IRS.GOV, https://www.irs.gov/pub/irs-utl/irsfbarreferenceguide.pdf [https://perma.cc/KH97-TUNG].

domestic entity) that has an interest in specified foreign financial assets and the value of those assets is more than the applicable reporting threshold.[51] The definition of specified foreign financial asset is:

1. Financial accounts maintained by a foreign financial institution.
2. The following foreign financial assets if they are held for investment and not held in an account maintained by a financial institution:
    a. Stock or securities issued by someone that is not a U.S. person (including stock or securities issued by a person organized under the laws of a U.S. possession),
    b. b.Any interest in a foreign entity, and
    c. c.Any financial instrument or contract that has an issuer or counterparty that is not a U.S. person (including a financial contract issued by, or with a counterparty that is, a person organized under the laws of a U.S. possession).[52]

Under the framework of the Form 8938, the IRS's determination that virtual currency is not currency, but property, works against the U.S. government's ability to require taxpayers to fully disclose their virtual currency holdings. By not classifying virtual currency as currency, it appears taxpayers do not meet the definition of "specified foreign financial assets," and, therefore, do not need to report their virtual currency account balances on Form 8938.[53] From the perspective of both FinCEN and the IRS, it seems probable that they will try to expand the definition of specified foreign financial assets in order to increase transparency while also denying taxpayers the tax benefit of classifying virtual currency as currency.[54]

51. *See* IRS, *About Form 8938, Statement of Specified Foreign Financial Assets*, IRS.GOV, https://www.irs.gov/forms-pubs/about-form-8938 [https://perma.cc/8AZK-6D2L].

52. Dept. of the Treasury, *2018 Instructions for Form 8938*, IRS.GOV, https://www.irs.gov/pub/irs-pdf/i8938.pdf [https://perma.cc/7KK8-3W3X].

53. From a tax perspective, filing both an FBAR and Form 8939 for virtual currency would be duplicative. Thus, to the extent the taxpayer makes an argument that one of the forms does not need to be filed, it is not unreasonable for the taxpayer to expect the IRS to file the other form.

54. *See, e.g.*, Lydia Beyoud, *Bitcoin Exchange Accounts Should Be Reported on FBARs, Analysts Say*, IRS BLOOMBERG TAX (Jun. 10, 2014), https://www.bna.com/bitcoin-exchange-accounts-n17179891170/ [https://perma.cc/75BX-DURT] (telling Bloomberg Tax that users should file FBARs).

FinCEN's jurisdiction expands beyond individual taxpayers and includes exchanges.[55] Exchanges where users can trade U.S. dollars for virtual currency have been particularly interesting to FinCEN.[56] FinCEN files lawsuits against the exchanges where U.S. dollars are converted to virtual currency in order to ensure compliance amongst exchanges.[57] Moreover, FinCEN has subjected more conventional and less openly law-breaking firms to the same FinCEN rules that apply to stock brokerage companies.[58] This is consistent with FinCEN's other official positions, which have stated that *users* (i.e. individual taxpayers) of virtual currency are not subject to FinCEN's enforcement actions, but *exchanges* (i.e. the institutions that are money transmitters) are subject to enforcement action.[59]

2. Penalties

As discussed earlier, virtual currency is already at a disadvantage compared to U.S. dollars due to the tax classification of virtual currency as property and not currency. While this article has shown that it is unclear if taxpayers have an FBAR requirement related to virtual currency

55. *See* Financial Crimes and Enforcement Network, *FinCEN Exchange Frequently Asked Questions*, U.S. TREASURY, https://www.fincen.gov/resources/fin-exchange/fincen-exchange-frequently-asked-questions [https://perma.cc/9E7N-XHFX].

56. Department of the Treasury Financial Crimes Enforcement Network, *Application of FinCEN's Regulations to Persons Administering, Exchanging, or Using Virtual Currencies*, FIN-2013-G001, U.S. TREASURY (Mar. 18, 2013), https://www.fincen.gov/sites/default/files/shared/FIN-2013-G001.pdf [https://perma.cc/GR29-FQFF].

57. *See, e.g.*, Steve Hudak, *FinCEN Fines BTC-e Virtual Currency Exchange $110 Million for Facilitating Ransomware, Dark Net Drug Sales*, FINCEN.COM (July 27, 2017), https://www.fincen.gov/news/news-releases/fincen-fines-btc-e-virtual-currency-exchange-110-million-facilitating-ransomware [https://perma.cc/M67X-S9GX] (explaining where FinCEN fined a virtual currency exchange $110 million for facilitating transactions involving ransomware, computer hacking, identity theft, tax refund fraud schemes, public corruption, and drug trafficking).

58. *See, e.g.*, Department of the Treasury Financial Crimes Enforcement Network, *Application of FinCEN's Regulations to Persons Issuing Physical or Digital Negotiable Certificates of Ownership of Precious Metals*, FIN-2015-R001, (Aug. 14, 2015), https://www.fincen.gov/sites/default /files/shared/FIN-2015-R001.pdf [https://perma.cc/9RHD-JCXN] (where FinCEN responded to an inquiry about whether more traditional aspects of a brokerage firm are subject to FinCEN reporting); Specifically, FinCEN stated:

> [W]hen the Company issues a freely transferable digital certificate of ownership to buyers, it is allowing the unrestricted transfer of value from a customer's commodity position to the position of another customer or a third-party, and it is no longer limiting itself to the type of transmission of funds that is a fundamental element of the actual transaction necessary to execute the contract for the purchase or sale of the currency or the other commodity.

Therefore no exemption applies and FinCEN deems the firm to be a money transmitter.

59. *See* Department of the Treasury Financial Crimes Enforcement Network, *supra* note 56.

holdings, some tax advisers believe FBARs should be filed.[60] Nevertheless, if FinCEN were to expand the scope of specified foreign financial assets to unequivocally include virtual currencies, the FBAR could apply to a significant proportion of U.S. taxpayers that would otherwise have no FBAR requirements.[61] While non-compliance with the FBAR may appear to be an insignificant consideration for most taxpayers because the FBAR is merely informational in nature,[62] the penalties for not filing are severe. The penalties range from a negligent violation[63] (least severe, considered a civil penalty) to "knowingly and willfully filing a false FBAR"[64] (most severe, considered both a civil and criminal penalty). The civil penalties for a negligent violation can be up to $1,078.[65] The civil penalties for knowingly and willfully filing a false FBAR can be up to the greater of $100,000 or 50% of the amount in the account at the time of the violation.[66] The criminal penalties for knowingly and willfully filing a false FBAR can be $10,000 or 5 years in prison, or both.[67] Theses penalties are considerably more severe than the civil penalties that taxpayers are traditionally subject to under Internal Revenue Code sections 6663, 6662, and 6651.[68] This is because FinCEN has the ability to fine taxpayers based on their account balance instead of an amount based on an underpayment. For the unknowing taxpayer, this can create a significant taxable event because FinCEN has the ability to create tax liabilities where none would otherwise exist.[69]

60. Rajiv Prasad, *FBAR and FATCA Compliance in the Age of Digital Currencies*, THE TAX ADVISER (May 1, 2014), https://www.thetaxadviser.com/issues/2014/may/clinic-story-07.html [https://perma.cc/NGP9-9QTQ].

61. Peter Rudegeair & Akane Otani, *Bitcoin Mania: Even Grandma Wants In on the Action*, WALL ST. J. (Nov. 29, 2017), https://www.wsj.com/articles/bitcoin-mania-even-grandma-wants-in-on-the-action-1511996653 [https://perma.cc/26JV-53QB].

62. There is no actual tax liability computed or owed on any of the FinCEN forms. FinCEN is responsible for financial crimes, but it is not responsible for administering the basic tax liabilities of the U.S. taxpayers. Those responsibilities are that of the IRS.

63. 31 U.S.C. § 5321(a)(6)(A) (2018).

64. 31 U.S.C. § 5322(b) (2018).

65. *See* 31 U.S.C. § 5321(a)(6)(A) (2018) (adjusting amounts for inflation per IRS guidance at IRS FBAR Reference Guide); *IRS FBAR Reference Guide*, IRS.GOV, https://www.irs.gov/pub/irs-utl/irsfbarreferenceguide.pdf [https://perma.cc/W3AR-8ZVY].

66. 31 U.S.C. § 5321 (2018).

67. 31 C.F.R. § 103.59(d) (2001).

68. *See* I.R.C. §§ 6662, 6663, and 6651 (2018); I.R.C. section 6663 applies a penalty to underpayments of tax attributed to fraud, and the penalty can be 75% of the underpayment. For underpayments of tax that do not meet the definition of fraud, accuracy related penalties are codified under I.R.C. section 6662 and can be 20% of the underpayment.

69. There are some remedial measures that taxpayers may avail themselves of if they fail to file an FBAR. For example, the IRS created programs in 2009, 2011, and 2012 known as the Offshore

C. Foreign Account Tax Compliance Act (FATCA)

In 2010, Congress enacted the Hiring Incentives to Restore Employment Act (HIRE Act).[70] As part of this law, a new chapter (Chapter 4) to the Internal Revenue Code was added. The purpose of Chapter 4 is to detect and deter the evasion of U.S. tax by U.S. persons. Chapter 4 is known for its acronym, FATCA (Foreign Account Tax Compliance Act).[71] Since its inception, FATCA has become subject to considerable complexity, unclear understandings, and even legal challenges.[72] FATCA generally requires Foreign Financial Institutions (FFIs) to identify U.S. account holders and report them to the IRS.[73] Moreover, non-U.S. entities that have U.S. account holders and are not FFIs (if an entity is not considered an FFI then it is considered an NFFE, or non-financial foreign entity) are required to provide information to the IRS about foreign accounts that are substantially owned by U.S. taxpayers.[74] If FFIs and NFFEs do not comply with the FATCA requirements, a 30% withholding tax is applied on certain payments made to FFIs or NFFEs.[75]

FATCA largely operates through agreements with foreign institutions. In general, FFIs must enter into an agreement with the IRS in which they agree to complete the following: perform due diligence on their account holders, report information regarding U.S. accounts to the IRS, comply with all IRS requests for additional information about U.S. accounts, obtain a waiver of any non-U.S. law restrictions on reporting the required information to the IRS from each U.S. account (or close the account if no waiver is obtained), and withhold a 30% tax on any *pass thru payments* made to (i) accounts that do not comply with the FFI's information requests and (ii) non-compliant FFIs (also known as NPFFIs).[76]

Voluntary Disclosure Program. The program generally allows taxpayers to file delinquent forms associated with offshore financial activity without paying any penalty.

70. Act of Mar. 18, 2010, Pub. L. No. 111–147, 71.

71. *See* I.R.C. §§ 1471–74 (2018).

72. *See* Peter J. Reilly, *Expatriate Lawsuit Featuring Rand Paul Shot Down*, FORBES.COM (Apr. 30, 2016), https://www.forbes.com/sites/peterjreilly/2016/04/30/expatriate-lawsuit-featuring-rand-paul-shot-down/#4e81c3fae628 [https://perma.cc/RFQ4-R6G6].

73. I.R.C. § 1471(c) (2018).

74. *Id.*

75. I.R.C. § 1471(a) (2018). The income subject to withholding is known as U.S. source fixed or determinable annual or periodical (FDAP) income. In addition, the 30% withholding tax will apply to the gross proceeds from the sale or other disposition of debt or equity interests in U.S. issuers.

76. I.R.C. § 1471(b)(1) (2018).

The requirements and requests set forth in FATCA are unprecedented in terms of their reach into foreign countries and foreign institutions. While it may appear that the IRS is attempting to raise revenue from foreign financial institutions, the 30% withholding tax is actually aimed at disclosure.[77] The purpose of the law is to deter U.S. taxpayers from keeping money in foreign banks with the hope of evading taxation.[78]

In order to determine whether a taxpayer has any reporting requirements under FATCA, the analysis hinges on the definition of the term "financial accounts," which includes any depository or custodial account a financial institution maintained.[79] Because most virtual currency *exchanges* accept deposits in the ordinary course of business, it is likely that the exchanges will be considered financial institutions for FATCA purposes. The more practical problem, however, is determining how the definition will be enforced. Many of the virtual currency exchanges exist solely because its users do not want to disclose their identity.[80] Ultimately, it seems likely the IRS will rely on the same John Doe summons that it issued to enforce FBAR and 1099 reporting.[81] It seems reasonable that in the short-term, while the John Doe Summons is pending, individual taxpayers that invest in virtual currency may be able to avoid FATCA reporting as long as their accounts do not increase in value above $50,000.[82] However, to the extent that virtual currency prices continue to rise in astronomical fashion, taxpayers may not be able to avoid FATCA reporting for too much longer.[83]

77. Philip T. Pasmanik, *FATCA's Withholding Requirements for Foreign Financial Institutions*, THE TAX ADVISOR (June 1, 2012), https://www.thetaxadviser.com/issues/2012/jun/pasmanik-jun12.html [https://perma.cc/KE88-H9H4].

78. Brian Knowlton, *I.R.S. Eases Some Rules for Taxpayers Overseas*, N.Y. TIMES (June 19, 2014), https://www.nytimes.com/2014/06/20/business/international/irs-eases-some-rules-for-taxpayers-overseas.html [https://perma.cc/S64P-QK7N].

79. I.R.C. §§ 1471(d)(2)(A) and (B) (2018).

80. Alan Feuer, *The Bitcoin Ideology*, N.Y. TIMES (Dec. 14, 2013), http://www.nytimes.com/2013/12/15/sunday-review/the-bitcoin-ideology.html [https://perma.cc/UV2S-GG99].

81. *See supra* text accompanying note 42.

82. *See* Dept. of the Treasury, *supra* note 52.

83. Steven Russolillo & Eun-Young Jeong, *The Force Behind Bitcoin's Meteoric Rise: Millions of Asian Investors*, WALL ST. J. (Dec. 12, 2017), https://www.wsj.com/articles/the-force-behind-bitcoins-meteoric-rise-millions-of-asian-investors-1513074750 [https://perma.cc/F8MB-NWJW].

V. ALTERNATIVE TREATMENTS

A. Like-Kind Exchange Treatment Under I.R.C. Section 1031

Classifying virtual currency as property does not completely close off future tax-free status for taxpayers looking to exchange one virtual currency for another. As discussed earlier, general tax principles impose a tax on taxpayers that exchange one piece of property for another piece of property.[84] The tax is imposed on the fair market value of the property received, less the basis of the property exchanged.[85] There are tax provisions, however, that allow taxpayers to recognize no gain or loss if property is exchanged for qualifying property.[86] One provision is section 1031.[87] Section 1031 provides non-recognition of gain or loss in business or investment property if exchanged solely for property that is "like kind."[88]

As part of the mechanical operation of section 1031, taxpayers may defer the gain or loss that would otherwise have been recognized under section 1001.[89] From a virtual currency perspective, this policy provides substantial relief for taxpayers that are unable to accurately report the change in their virtual currency portfolio every time Bitcoin is exchanged for Ethereum or any other exchange between two virtual currencies. Under current construction of section 1031, there is minimal precedent to support a taxpayer position that the exchange of one virtual currency for another qualifies for section 1031.[90] Traditionally, taxpayers that have succeeded in securing section 1031 like-kind treatment have been able to fit within the statutory construction of Treasury Regulation section 1.1031(a)-1(b), which provides that, "the words *like kind* have reference

84. I.R.C. § 61(a)(3) (2018).

85. I.R.C. § 1001(b) (2018).

86. Recall that a *realized* gain is only included under I.R.C. section 61 "gross income" to the extent that is it *recognized.*

87. I.R.C. § 1031(a) (2018).

88. *Id.*

89. It is worth noting that there are some circumstances in the tax code where deferral can become permanent, such as upon death when property is generally not taxed.

90. There have been some supportable positions taken by the IRS as it relates to gold exchanges; *See* Rev. Rul. 79– 214, 1979–2 C.B. 90 (Where a taxpayer exchanged Mexican 50-peso bullion-type gold coins for Austrian 100-corona bullion-type gold coins, the exchange qualified as like-kind under I.R.C. §1031(a) because the coins are bullion-type, with value measured by their gold content. Moreover, neither coin was considered currency in the issuing country. Lastly, because neither set of coins was a circulating currency, the differences were primarily of size, shape, and amount of gold content.).

to the nature or character of the property and not to its grade or quality.[91] One kind or class of property may not. . .be exchanged for property of a different kind or class."[92]

Analyzing virtual currencies under the section 1031 framework provides for some interesting questions that have yet to be answered by the IRS. The best predictor of how the IRS will treat like-kind exchanges between virtual currencies is gold. The two most favorable Revenue Rulings for like-kind exchange treatment are Revenue Ruling 82-96[93] and 76-214.[94] In Revenue Ruling 82-96, the IRS determined that the exchange of Canadian Maple Leaf gold coins for gold bullion did qualify for nonrecognition under section 1031.[95] The facts stated that the Canadian Maple Leaf gold coin was legal tender in Canada but had no numismatic value.[96] Both the gold coins and the bullion were held for investment purposes by the U.S. taxpayer.[97] The Revenue Ruling held:

> Because the value of the gold content in each Canadian Maple Leaf gold coin greatly exceeds its face value, it is not a circulating medium of exchange. Therefore, the Canadian Maple Leaf gold coin is property rather than money for purposes of section 1031(a) of the Code.
>
> Because the Canadian Maple Leaf gold coins are bought and sold for their gold content, they are bullion-type coins. Therefore, the nature and character of the gold bullion and the Canadian Maple Leaf gold coins are the same, and they qualify as 'like kind' property as that term is used in section 1.1031(a)-1(b) of the regulations. [98]

This conclusion hinges on two key features of the property. One, Canadian Maple Leaf gold coins were actually considered currency by the Canadian government but were not circulating because they were more valuable from an investment perspective than they were from a currency perspective.[99] This suggests that the IRS will look past the issue of how

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91. It is also probable that like-kind exchange treatment will be even more difficult to theoretically secure since the passage of the 2017 Tax Cut and Jobs Act, which narrowed the eligibility for section 1031 treatment to include only real property not held primarily for sale; *See* Pub. L. No. 115–97, 131 Stat. 2054.

92. *See* Treas. Reg. § 1.1031(a)-1(b) (2019).

93. Rev. Rul. 82-96, 1982-1 C.B. 113.

94. Rev. Rul. 76-214, 1976-1 C.B. 218.

95. Rev. Rul. 82–96, 1982–1 C.B. 113.

96. *Id.*

97. *Id.*

98. *Id.*

99. This is an assumption, based on the economics of what happens when a currency is actually worth more than its legal value. Another example are rare pennies that are sold on eBay for thousands of dollars when their legal value is only worth one cent.

virtual currencies are recognized by governments and instead to how they are held by investors. Second, to date, virtual currencies are not recognized as currency by the U.S. government and, therefore, from a U.S. taxpayer perspective, are held primarily for investing purposes.[100] These facts are likely to evolve. For example, some other governments besides the U.S. government will eventually accept virtual currencies as legal tender.[101] At the same time, U.S. taxpayers will not only hold virtual currencies for investment purposes but also hold them for traditional currency purposes.[102] In short, while Revenue Ruling 82-96 did provide the taxpayer with favorable tax treatment, the facts surrounding virtual currency are changing so quickly that most taxpayers would find it unadvisable to rely on the ruling when exchanging one virtual currency for another.

The other Revenue Ruling that provided favorable section 1031 treatment to taxpayers is Revenue Ruling 76-214.[103] Revenue Ruling 76-214 held that the exchange of Mexican 50-peso bullion-type gold coins for Austrian 100-corona bullion-type gold coins qualifies for nonrecognition under section 1031.[104] Because the gold coins were restrikes and were not circulating mediums of exchange in their respective countries, section 1031 applied.[105] While these facts do not perfectly align with virtual currency, an argument can be made that to the extent two different virtual currencies are not circulating as mediums of exchange in the U.S., section 1031 treatment may be available. That said, the issue becomes: what happens when some other country besides the U.S. begins to recognize and accept virtual currency as legal tender? Revenue Ruling 76-214 suggests that once one virtual currency is recognized by any foreign government, then its exchange with any other virtual currency that is not recognized by any government would not qualify for section 1031 treatment. This conclusion that the IRS would make a section 1031 determination based on a foreign country's law appears unlikely in the

100. The fact that the U.S. does not recognize virtual currency as legal tender appears to have less and less of a deterring impact on U.S. taxpayers, as the general public becomes more comfortable with accepting virtual currency as payment. *See, e.g.*, Sally French, *Miami penthouse goes on the market for 33 bitcoin – cash not accepted*, MARKETWATCH (Dec. 13, 2017), https://www.marketwatch.com/story/miami-penthouse-goes-on-the-market-for-33-bitcoin——cash-not-accepted-2017-12-13 [https://perma.cc/T79L-NNSH].

101. *See, e.g.*, Emiko Terazono, *Bitcoin gets official blessing from Japan*, FIN. TIMES, (Oct. 17, 2017) https://www.ft.com/content/b8360e86-aceb-11e7-aab9-abaa44b1e130 [https://perma.cc/F4B2-2QGU].

102. *Id.*

103. Rev. Rul. 76–214, 1976–1 C.B. 218.

104. *Id.*

105. *Id.*

context of virtual currency. Nonetheless, if the IRS adopts this position, it will open U.S. taxpayers to considerable uncertainty as the section 1031 rules would be subject to constant fluctuations based on the whims of foreign laws.

Lastly, how would the section 1031 rules apply when U.S. taxpayers are exchanging crypto assets between different layers? For example, what if a taxpayer exchanges Bitcoin (described above as a medium of exchange) for Eretheum, which is a *crypto protocol*. In this sense, the analogy of crypto assets/virtual currency to gold appears to be too far of a leap. As such, it is hard to imagine the IRS applying the same principles to virtual currency as it does to gold, which makes it difficult for taxpayers to rely on any revenue rulings that were issued based on gold exchanges.

B. Classifying Virtual Currency as Currency Under Subchapter J

The dichotomy of classifying Bitcoin as either property or currency is a fundamental question. While not exhaustive, this article has explored the structural framework for how to treat virtual currency as property.[106] In the event the IRS does classify virtual currency as currency, an entirely separate set of IRS regulations will apply to virtual currency and its owners.

The starting point for determining the tax consequences of a virtual currency, as it relates to currency, is subchapter J of the Internal Revenue Code.[107] Traditionally, subchapter J is reserved for transactions that include: U.S. companies operating foreign branches in a currency other than the U.S. dollar,[108] U.S. companies determining how to compute their earnings and profits and tax pools into U.S. dollars,[109] and U.S. taxpayers that receive, or are required to pay, amounts denominated in non-functional currency.[110]

If virtual currency were classified as a currency, multinational corporations would immediately need to comply with sections 987 and 988.[111] Section 988, in particular, would require payments made or received in virtual currency to be subject to gain or loss based on the value of the exchange rate between the virtual currency and the U.S. dollar.[112]

106. The best analogy is gold.
107. *See* I.R.C. §§ 985–89 (2018).
108. *See* I.R.C. § 987 (2018).
109. *See* I.R.C. § 986 (2018).
110. *See* I.R.C. § 988 (2018).
111. This is due to the fact that multinational organizations operate as branches in foreign jurisdictions.
112. *See* I.R.C. § 988(a)(1)(A) (2018).

For example, assume a corporate taxpayer uses the U.S. dollar as its own functional currency. If the taxpayer incurred a loan denominated in Bitcoin (and presumably had to make payments on the loan in Bitcoin), section 988 would apply to any gain or loss that occurs due to the exchange rate between U.S. dollars and Bitcoins.

The rules under subchapter J are subject to significant complexity through regulations promulgated since 1991,[113] revised in 2006,[114] and finalized in 2016.[115] Nevertheless, the basic rule of section 988 gain or loss creates ordinary income to the taxpayer. Ordinary treatment would be in contrast to the current treatment of virtual currency gains or losses, which are characterized as capital.[116] Of course, the key difference that occurs if virtual currency is considered currency is that basic exchange transactions that occur between buyer and seller would not be taxed as an exchange of two types of property. Recall that 987 and 988 gains or losses are only created when there are two currencies at stake—they do not arise if there is only one currency involved in a transaction. To highlight why no taxable transaction occurs if virtual currency is considered a currency, review the farmers market example previously discussed.[117] A purchase of precious metals with virtual currency would not create any taxable transaction to the purchaser. Only the seller is taxed. The purchaser is not taxed because they are not considered to have recognized any gain or loss.

Classifying virtual currency as currency is not without its pitfalls. Sections 987 and 988 gains or losses could create material changes in taxable income for taxpayers that operate a business unit with virtual currency as its functional tax currency.[118] In addition, for entities that operate with significant assets, the 2016 Final and Temporary Regulations codified a dichotomy between "historic" and "financial" assets.[119] These rules are not any more difficult to enforce or compute with the advent of

113. 56 Fed. Reg. 48457–48464 (proposed Sept. 25, 1991) (to be codified at 26 C.F.R. pt. 1).

114. 71 Fed. Reg. 52876–52918 (proposed Sept. 7, 2006) (to be codified at 26 C.F.R. pt. 1).

115. 81 Fed. Reg. 88806–88884 (proposed Dec. 8, 2016) (to be codified at 26 C.F.R. pt. 1 and 602).

116. While ordinary income is traditionally subject to higher marginal tax rates than capital gain, the individual facts and circumstances of each taxpayer would determine if the taxpayer is better off with ordinary or capital treatment. For example, if the taxpayer has substantial ordinary losses (from income other than section 988) during the year to absorb the section 988 income, but no capital losses to absorb the section 988 capital gain, ordinary treatment may be beneficial.

117. *See supra* pp. 6–7.

118. Georgina Lee, *Accounting 'Big Four' PwC accepts bitcoin payment in Hong Kong*, SOUTH CHINA MORNING POST (July 20, 2018), http://www.scmp.com/business/companies/article/2122349/accounting-big-four-pwc-accepts-bitcoin-payment-hong-kong [https://perma.cc/Y4ZR-ZSDF].

119. 81 Fed. Reg. 88806-88884.

virtual currency, but to the extent that exchange rates remain volatile, the 987 and 988 gains and losses could be substantial.[120]

VI. RECOGNIZING LOSSES ON VIRTUAL CURRENCY UNDER I.R.C. SECTION 165

A. *Traditional Capital Treatment Under Section 1211*

In order for a loss to be recognized by a taxpayer, the loss must be allowable.[121] To the extent that losses are not allowable, they are disallowed. Disallowance of losses are categorized into two separate classifications. Disallowed losses can either be permanently disallowed or deferred. Examples of permanent disallowance are included in sections 267[122] and 165(c).[123] Examples of deferred losses are included in sections 469[124] and 1211.[125]

Due to the IRS's current determination of virtual currency as property, any recognized gain or loss related to virtual currency is characterized as capital.[126] In general, section 165 does not authorize the taxpayer to take a deduction for a capital loss. Instead, section 165(f) refers the taxpayer to sections 1211 and 1212.[127] Section 1211 limits the taxpayer's ability to deduct capital losses. From an individual accounting perspective, taxpayers are allowed a deduction for capital losses to the extent of capital gains.[128] To the extent that capital losses exceed capital gains, the taxpayer can deduct up to $3,000 of capital losses against his or her ordinary income.[129] Determining the net capital gains and net capital losses is particularly important to those taxpayers that are engaged in

120. Alexander Osipovich. *Bitcoin Futures Promise Wild Ride for Risk-Loving Traders*, WALL ST. J. (Dec. 8, 2017), https://www.wsj.com/articles/bitcoin-futures-promise-Wild-ride-for-risk-loving-traders-1512745187 [https://perma.cc/4XWF-QFHV].

121. *See* I.R.C. § 165 (2018).

122. I.R.C. § 267 (2018) (addressing losses created between related party transactions).

123. I.R.C. § 165 (2018) (starting point for allowing any tax loss).

124. I.R.C. § 469 (2018) (disallowing passive activity losses incurred by individuals, estates, trusts, closely held C corporations, and personal service corporations).

125. I.R.C. § 1211 (2018) (limiting capitals losses incurred by both corporations and individuals).

126. *See* I.R.C. § 1221 (2018).

127. The basic framework for characterization is set forth in I.R.C. §§ 1211–23 (2018).

128. I.R.C. § 1211(b) (2018).

129. I.R.C. § 1211(b)(1)–(2) (2018).

frequent buying and selling of virtual currencies through extreme periods of volatility.[130]

From a loss perspective, taxpayers may also have other allowance provisions at their disposal outside of the traditional section 1211 framework. For example, under section 165(c), damage to non-business property caused by "other casualty or theft" is deductible.[131] The loss may generally be deductible in the year in which it incurred. Individual taxpayers may claim the deduction as an itemized deduction but only with respect to the portion of the loss for which the individual taxpayer is not compensated by insurance.[132] This creates some unfamiliar territory for individual taxpayers as it applies to virtual currency. Many media sources have reported that virtual currencies have been stolen from users.[133] Like many other areas of virtual currency, the Treasury Department has not released any guidance on these potential scenarios, and, therefore, exploring more non-traditional tax rules that allow deductible tax losses related to virtual currency is the next logical analysis for taxpayers.

B. Non-Traditional Interpretation Under Revenue Ruling 2009-9

The scope of section 165 losses includes many unique circumstances. Recall in the wake of the 2008 financial crisis, Bernie Madoff, the renowned Wall Street investor, was convicted of operating a Ponzi scheme.[134] In the aftermath of the Ponzi scheme, taxpayers that had previously paid taxes on what they believed was income determined that the losses incurred due to the Ponzi scheme more closely resembled losses due to theft than traditional capital losses.[135] To help clarify the tax

130. Alexander Osipovich & Gunjan Banerji, *Who's Afraid of Bitcoin? The Futures Traders Going Short*, WALL ST. J. (Dec. 11, 2017), https://www.wsj.com/articles/whos-afraid-of-bitcoin-futures-traders-going-short-1513036234 [https://perma.cc/5VFF-5TEK].

131. I.R.C. § 165 (2018) (explaining that losses are generally more difficult to claim after the 2017 Tax Cuts and Jobs Act, which requires the loss to be related to a Federally Declared Disaster).

132. There appears to be no federal insurance available to taxpayers that keep deposits in virtual currency. *See* Fed. Deposit Ins. Corp., FDIC.GOV, https://www.fdic.gov/ [https://perma.cc/MFA6-VU6L].

133. Rishi Iyengar, *More than $70 million stolen in bitcoin hack*, CNN BUSINESS (Dec. 8, 2017), http://money.cnn.com/2017/12/07/technology/nicehash-bitcoin-theft-hacking/index.html [https://perma.cc/VEP2-8G2F].

134. Diana B. Henriques, *Madoff Is Sentenced to 150 Years for Ponzi Scheme*, N.Y. TIMES (June 29, 2009), http://www.nytimes.com/2009/06/30/business/30madoff.html [https://perma.cc/BQW2-CNRX].

135. Natalie Bell Takacs, *Deducting Ponzi Scheme Losses: Practical Issues*, THE TAX ADVISER (Aug. 1, 2009) ,https://www.thetaxadviser.com/issues/2009/aug/deductingponzischemelossespracticalissues.html [https://perma.cc/B45V-MDP8].

treatments of a Ponzi scheme victim, the IRS issued Notice Revenue Ruling 2009-9, which states:

> For federal income tax purposes, "theft" is a word of general and broad connotation, covering any criminal appropriation of another's property to the use of the taker, including theft by swindling, false pretenses and any other form of guile. A taxpayer claiming a theft loss must prove that the loss resulted from a taking of property that was illegal under the law of the jurisdiction in which it occurred and was done with criminal intent. However, a taxpayer need not show a conviction for theft.[136]

The specific language above is worth emphasizing: "a taxpayer claiming a theft loss must prove that the loss resulted from a taking of property that was illegal *under the law of the jurisdiction* in which it occurred and was done with criminal intent."[137] In the Ponzi scheme perpetuated by Bernie Madoff, determining "the law of the jurisdiction" is the U.S. The United States does not have jurisdiction over most forms of virtual currency nor does any other country.[138] One of the reasons virtual currency is so attractive to investors is because the currency is not subject to any central bank.[139] Thus, an open question remains: if a taxpayer incurs a theft of their virtual currency, is the loss allowed under I.R.C. section 165(c)? While Revenue Ruling 2009-9 is not directed at virtual currencies, it appears the IRS's definition of "theft" would not apply and therefore leave taxpayers with potential non-deductible tax losses if their virtual currency were hacked or stolen. Of course, similar to how the IRS issued Revenue 2009-9 in the wake of the Bernie Madoff scandal, the IRS may issue a Revenue Ruling on the treatment of stolen virtual currency.

VIII. THE DIFFICULTY IN MOVING FORWARD: EXECUTIVE ORDER 13771

On January 30, 2017, Executive Order 13771, Order on Reducing Regulation and Controlling Regulatory Costs, was signed by President Trump.[140] The order states, "whenever an executive department or agency publicly proposes for notice and comment or otherwise promulgates a new

136. Rev. Rul. 2009–9, 2009–1 C.B. 735 (internal citations omitted).

137. *Id.* (emphasis added).

138. The IRS conceded this by noting in Notice 2014–21 that bitcoin does not have legal tender status in any jurisdiction.

139. Steven Russolillo, *The Bitcoin Bandwagon: Central Banks Consider Their Own Cryptocurrencies*, WALL ST. J. (Sept. 18, 2017), https://www.wsj.com/articles/biting-back-on-bitcoin-central-banks-chew-over-introducing-cryptocurrencies-1505729052 [https://perma.cc/4V9V-LVHG].

140. Exec. Order No. 13,771, 82 Fed. Reg. 9339 (Jan. 30, 2017).

regulation, it shall identify at least two existing regulations to be repealed."[141] This article has highlighted extensive uncertainties surrounding the Treasury Department's ability to regulate and tax virtual currencies. Prior to 2017, the Treasury Department's main vehicle for clarification on virtual currencies was to issue proposed regulations, subject those regulations to a notice and comment period, and then issue final or temporary regulations.[142] Executive Order 13771 likely prevents this process from occurring as the Treasury Department has been reluctant to identify any regulations that could potentially be repealed.[143] One way for the IRS to circumvent this Executive Order is to only issue Notices and Revenue Rulings because these are not considered "regulations" subject to notice and comment. While this may provide for some immediate relief in understanding how the IRS views virtual currency, without new regulations it is possible taxpayers will end up with larger portions of their investment portfolio that have little government oversight and few clear tax regulations.

Going forward, the prospect of the IRS not issuing new rules and regulations will pose even more difficulties for taxpayers that, in good faith, are trying to abide by U.S. tax law. For example, new technology start-up companies are creating their own crypto currencies through initial coin offerings (ICOs) instead of going through expensive initial public offerings (IPOs).[144] The tax consequences of ICOs would initially appear to be subject to section 83, but attempting to compare securities to new virtual tokens is quite problematic since ICOs offer none of the traditional property rights and oversight that securities offer.[145]

Bitcoin Cash is another example where the lack of regulations will create a vacuum in tax law. While Bitcoin Cash operates in the same *layer*

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141. *Id.*

142. *See, e.g.*, T.D. 9790, 81 Fed. Reg. 72858–72984 (Oct. 21, 2016) (where the Treasury Department issued extensive proposed regulations on I.R.C. section 385, documented the notice and comment period, and then issued even more extensive Final and Temporary Regulations).

143. *See, e.g.*, Exec. Order No. 13,789, 82 Fed. Reg. 1931 (Oct. 16, 2017) (which requires government agencies to identify potential regulations that could be repealed) and Notice 2017-38 (where the IRS responded to Executive Order 13,789 with only eight regulations it deemed could be repealed). It is worth noting the significance (or lack therefore) of identifying only eight regulations that could be repealed when, as of estimates in 2015, it has been shown that federal tax laws and regulations exceeded 10 million words. *See*, Scott Greenberg, *Federal Tax Laws and Regulations Are Now Over 10 Million Words Long*, TAX FOUNDATION (Oct. 8, 2015), https://taxfoundation.org/federal-tax-laws-and-regulations-are-now-over-10-million-words-long/ [https://perma.cc/WBC6-H6FB].

144. Nathaniel Popper, *An Explanation of Initial Coin Offerings*, N.Y.TIMES (Oct. 27, 2017), https://www.nytimes.com/2017/10/27/technology/what-is-an-initial-coin-offering.html [https://perma.cc/5TUZ-M6CZ].

145. I.R.C. § 83(a) (2018).

as Bitcoin, in that it serves as a medium of exchange, Bitcoin Cash was created by miners of Bitcoin.[146] Anyone that held five Bitcoins also received five units of Bitcoin Cash.[147] The tax treatment of Bitcoin Cash resembles transactions that look both like corporate dividends as well as stock splits. Dividends are taxable, but stock splits are not taxable.[148] To the extent that Bitcoin Cash is an entirely new virtual currency, any taxpayer who receives it has received an accretion of wealth. Accretions of wealth create fundamental tax liabilities.[149] The tax liability will be based on the value of Bitcoin Cash at the time of taxpayer receipt, thus giving rise to the following question: what is the value of Bitcoin Cash upon receipt? All of these questions (and many future questions) need to be addressed by the IRS. Whether those answers come from rules and regulations or notices and rulings remain to be seen. However, as long as the IRS must abide by Executive Order 13771, expect the IRS to continue to not address the tax consequences of virtual currency, and even if it does, expect guidance only in the form of notices.

VIII. CONCLUSION

Virtual currencies have been around since 2008 but have only recently been in the spotlight of mainstream investors and the general public. The IRS has staked its position that virtual currency is considered property for the Internal Revenue Code through one notice.[150] One notice is not sufficient for taxpayers to rely on the myriad of tax issues that virtual currencies are creating. While proposing a specific date for the IRS to effectively regulate virtual currencies may seem arbitrary, providing

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146. In the Economist, L.S. described mining as follows:

> Every ten minutes or so mining computers collect a few hundred pending bitcoin transactions (a "block") and turn them into a mathematical puzzle. The first miner to find the solution announces it to others on the network. The other miners then check whether the sender of the funds has the right to spend the money, and whether the solution to the puzzle is correct. If enough of them grant their approval, the block is cryptographically added to the ledger and the miners move on to the next set of transactions (hence the term 'blockchain'). The miner who found the solution gets 25 bitcoins as a reward, but only after another 99 blocks have been added to the ledger. All this gives miners an incentive to participate in the system and validate transactions.

How bitcoin mining works, THE ECONOMIST (Jan. 20, 2015), https://www.economist.com/blogs/economist-explains/2015/01/economist-explains-11 [https://perma.cc/6F7T-AHVB].

147. *Id.*

148. *See* IRS, *Frequently Asked Questions, IRS Stocks (Options, Splits, Traders)*, IRS.GOV, https://www.irs.gov/faqs/capital-gains-losses-and-sale-of-home/stocks-options-splits-traders/stocks-options-splits-traders-7 [https://perma.cc/BLL5-XKGM].

149. *See* Old Colony Trust Co. v. Comm'r, 279 U.S. 716 (1929).

150. IRS Notice, *supra* note 18.

the IRS with some competition in order to expedite the regulatory process may spur the agency to more quickly provide taxpayers with effective guidance. If the best and brightest at U.S. technology companies are currently attempting to defeat StarCraft, the best and brightest at the IRS should face its own technology-based deadline: effectively issue guidance on virtual currency before the technology companies beat humans at StarCraft. Let the competition begin.